

Calendar No. 768

107TH CONGRESS
2D SESSION**S. 556****[Report No. 107-347]**

To amend the Clean Air Act to reduce emissions from electric powerplants,
and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 15, 2001

Mr. JEFFORDS (for himself, Mr. LIEBERMAN, Ms. COLLINS, Mr. SCHUMER, Ms. SNOWE, Mrs. FEINSTEIN, Mr. LEAHY, Mrs. CLINTON, Mr. KERRY, Mr. DODD, Mr. TORRICELLI, Mr. CORZINE, Mr. KENNEDY, Mr. REED, Mrs. BOXER, Mr. FEINGOLD, Mr. CARPER, Mr. BIDEN, Mr. CHAFEE, Mr. WELLSTONE, Mr. SARBANES, Mr. WYDEN, and Mr. EDWARDS) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

NOVEMBER 19, 2002

Reported by Mr. JEFFORDS, with an amendment

[Strike out all after the enacting clause and insert the part printed in italic]

A BILL

To amend the Clean Air Act to reduce emissions from
electric powerplants, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Clean Power Act of
3 2001”.

4 **SEC. 2. REDUCTION OF EMISSIONS FROM POWERPLANTS.**

5 Part A of title I of the Clean Air Act (42 U.S.C. 7401
6 et seq.) is amended by adding at the end the following:

7 **“SEC. 132. REDUCTION OF EMISSIONS FROM POWER-**
8 **PLANTS.**

9 “(a) **EMISSION REDUCTION OBJECTIVES.**—The emis-
10 sion reduction objectives of this section are to reduce in
11 the States, not later than January 1, 2007—

12 “(1) aggregate sulfur dioxide emissions from
13 powerplants by 75 percent from the levels required
14 at full implementation of the Phase II sulfur dioxide
15 requirements under title IV (relating to acid deposi-
16 tion control);

17 “(2) aggregate nitrogen oxide emissions from
18 powerplants by 75 percent from 1997 levels;

19 “(3) aggregate carbon dioxide emissions from
20 powerplants to the level of carbon dioxide emissions
21 from powerplants in 1990; and

22 “(4) aggregate mercury emissions from power-
23 plants by 90 percent from 1999 levels.

24 “(b) **AGENCY ACTION.**—

25 “(1) **REGULATIONS.**—

1 “(A) IN GENERAL.—Not later than 2 years
 2 after the date of enactment of this section, the
 3 Administrator shall promulgate regulations to
 4 achieve the emission reduction objectives speci-
 5 fied in subsection (a).

6 “(B) ELEMENTS.—The regulations pro-
 7 mulgated under subparagraph (A)—

8 “(i) shall achieve the objectives in a
 9 manner that the Administrator determines
 10 will allocate required emission reductions
 11 equitably, taking into account emission re-
 12 ductions achieved before the date of enact-
 13 ment of this section and other relevant fac-
 14 tors;

15 “(ii) may include market-oriented
 16 mechanisms (such as emissions trading
 17 based on generation performance stand-
 18 ards, auctions, or other allocation meth-
 19 ods), except that emissions trading in mer-
 20 cury shall be prohibited;

21 “(iii) shall prevent localized adverse
 22 effects on public health and the environ-
 23 ment and ensure that significant emission
 24 reductions are achieved in both the eastern
 25 and western regions;

1 “(iv) shall ensure that any captured
2 or recovered mercury is not re-released
3 into the environment; and

4 “(v) shall include—

5 “(I) appropriate incentives to in-
6 crease energy efficiency; and to use
7 renewable energy; to achieve the emis-
8 sion reduction objectives specified in
9 subsection (a); and

10 “(II) policies to reduce the rate
11 of growth of natural gas consumption
12 that are at least as effective as the
13 advanced demand-side policies for
14 end-use sectors and advanced supply-
15 side policies for the electricity sector
16 described in the report prepared by
17 the Department of Energy entitled
18 ‘Scenarios for a Clean Energy Future’
19 and dated November 2000.

20 “(2) EFFECT OF FAILURE TO PROMULGATE.—

21 If the Administrator fails to promulgate regulations
22 in accordance with paragraph (1) by the date speci-
23 fied in that paragraph, each powerplant shall achieve
24 the emission reduction objectives specified in sub-
25 section (a) that are applicable to the powerplant.

1 “(c) ~~ADDITIONAL REDUCTIONS.~~—The regulations
 2 promulgated under subsection (b) may require additional
 3 reductions in emissions from powerplants if the Adminis-
 4 trator determines that the emission levels necessary to
 5 achieve the emission reduction objectives specified in sub-
 6 section (a) are not reasonably anticipated to protect public
 7 health or welfare.

8 “(d) ~~MODERNIZATION OF OUTDATED POWER-~~
 9 ~~PLANTS.~~—

10 “(1) ~~IN GENERAL.~~—On the later of the date
 11 that is 30 years after the outdated powerplant com-
 12 mences operation or the date that is 5 years after
 13 the date of enactment of this section, each outdated
 14 powerplant shall comply with—

15 “(A) the most recent new source perform-
 16 ance standards promulgated under section 111;
 17 and

18 “(B) the requirements under parts C and
 19 D that are applicable to modified sources.

20 “(2) ~~ADDITIONAL REQUIREMENTS.~~—The re-
 21 quirements of this subsection shall be in addition to
 22 the requirements of the regulations promulgated
 23 under subsection (b).

1 “(e) OTHER REQUIREMENTS.—This section does not
2 affect the applicability of any other requirement of this
3 Act.

4 “(f) DEFINITIONS.—In this section:

5 “(1) WESTERN REGION.—The term ‘western re-
6 gion’ means all States that have a majority of their
7 land area within the region encompassed by the
8 Western Systems Coordinating Council.

9 “(2) EASTERN REGION.—The term ‘eastern re-
10 gion’ means all States that are not in the western
11 region.

12 “(3) OUTDATED POWERPLANT.—The term
13 ‘outdated powerplant’ means a powerplant that has
14 been in operation for a period of 30 years or more.

15 “(4) POWERPLANT.—The term ‘powerplant’
16 means an electric generation facility with a name-
17 plate capacity of 15 megawatts or more that uses a
18 combustion device to generate electricity for sale.”.

19 **SECTION 1. SHORT TITLE.**

20 *This Act may be cited as the “Clean Power Act of*
21 *2002”.*

22 **SEC. 2. ELECTRIC ENERGY GENERATION EMISSION REDUC-**
23 **TIONS.**

24 (a) *IN GENERAL.*—*The Clean Air Act (42 U.S.C. 7401*
25 *et seq.) is amended by adding at the end the following:*

1 **“TITLE VII—ELECTRIC ENERGY**
 2 **GENERATION EMISSION RE-**
 3 **DUCTIONS**

“Sec. 701. Findings.

“Sec. 702. Purposes.

“Sec. 703. Definitions.

“Sec. 704. Emission limitations.

“Sec. 705. Emission allowances.

“Sec. 706. Permitting and trading of emission allowances.

“Sec. 707. Emission allowance allocation.

“Sec. 708. Mercury emission limitations.

“Sec. 709. Other hazardous air pollutants.

“Sec. 710. Effect of failure to promulgate regulations.

“Sec. 711. Prohibitions.

“Sec. 712. Modernization of electricity generating facilities.

“Sec. 713. Relationship to other law.

4 **“SEC. 701. FINDINGS.**

5 “Congress finds that—

6 “(1) public health and the environment continue
 7 to suffer as a result of pollution emitted by power-
 8 plants across the United States, despite the success of
 9 Public Law 101–549 (commonly known as the ‘Clean
 10 Air Act Amendments of 1990’) (42 U.S.C. 7401 *et*
 11 *seq.*) in reducing emissions;

12 “(2) according to the most reliable scientific
 13 knowledge, acid rain precursors must be significantly
 14 reduced for the ecosystems of the Northeast and South-
 15 east to recover from the ecological harm caused by
 16 acid deposition;

17 “(3) because lakes and sediments across the
 18 United States are being contaminated by mercury
 19 emitted by powerplants, there is an increasing risk of

1 *mercury poisoning of aquatic habitats and fish-con-*
 2 *suming human populations;*

3 “(4)(A) *electricity generation accounts for ap-*
 4 *proximately 40 percent of the total emissions in the*
 5 *United States of carbon dioxide, a major greenhouse*
 6 *gas causing global warming; and*

7 “(B) *the quantity of carbon dioxide in the at-*
 8 *mosphere is growing without constraint and well be-*
 9 *yond the international commitments of the United*
 10 *States;*

11 “(5) *the cumulative impact of powerplant emis-*
 12 *sions on public and environmental health must be ad-*
 13 *dressed swiftly by reducing those harmful emissions to*
 14 *levels that are less threatening; and*

15 “(6)(A) *the atmosphere is a public resource; and*

16 “(B) *emission allowances, representing permis-*
 17 *sion to use that resource for disposal of air pollution*
 18 *from electricity generation, should be allocated to pro-*
 19 *mote public purposes, including—*

20 “(i) *protecting electricity consumers from*
 21 *adverse economic impacts;*

22 “(ii) *providing transition assistance to ad-*
 23 *versely affected employees, communities, and in-*
 24 *dustries; and*

1 “(iii) promoting clean energy resources and
2 energy efficiency.

3 **“SEC. 702. PURPOSES.**

4 “The purposes of this title are—

5 “(1) to alleviate the environmental and public
6 health damage caused by emissions of sulfur dioxide,
7 nitrogen oxides, carbon dioxide, and mercury result-
8 ing from the combustion of fossil fuels in the genera-
9 tion of electric and thermal energy;

10 “(2) to reduce by 2008 the annual national emis-
11 sions from electricity generating facilities to not more
12 than—

13 “(A) 2,250,000 tons of sulfur dioxide;

14 “(B) 1,510,000 tons of nitrogen oxides;

15 “(C) 2,050,000,000 tons of carbon dioxide;

16 and

17 “(D) 5 tons of mercury;

18 “(3) to effectuate the reductions described in
19 paragraph (2) by—

20 “(A) requiring electricity generating facili-
21 ties to comply with specified emission limita-
22 tions by specified deadlines; and

23 “(B) allowing electricity generating facili-
24 ties to meet the emission limitations (other than
25 the emission limitation for mercury) through an

1 *alternative method of compliance consisting of*
 2 *an emission allowance and transfer system; and*
 3 “(4) *to encourage energy conservation, use of re-*
 4 *newable and clean alternative technologies, and pollu-*
 5 *tion prevention as long-range strategies, consistent*
 6 *with this title, for reducing air pollution and other*
 7 *adverse impacts of energy generation and use.*

8 **“SEC. 703. DEFINITIONS.**

9 *“In this title:*

10 “(1) *COVERED POLLUTANT.—The term ‘covered*
 11 *pollutant’ means—*

12 “(A) *sulfur dioxide;*

13 “(B) *any nitrogen oxide;*

14 “(C) *carbon dioxide; and*

15 “(D) *mercury.*

16 “(2) *ELECTRICITY GENERATING FACILITY.—The*
 17 *term ‘electricity generating facility’ means an electric*
 18 *or thermal electricity generating unit, a combination*
 19 *of such units, or a combination of 1 or more such*
 20 *units and 1 or more combustion devices, that—*

21 “(A) *has a nameplate capacity of 15*
 22 *megawatts or more (or the equivalent in thermal*
 23 *energy generation, determined in accordance*
 24 *with a methodology developed by the Adminis-*
 25 *trator);*

1 “(B) generates electric energy, for sale,
2 through combustion of fossil fuel; and

3 “(C) emits a covered pollutant into the at-
4 mosphere.

5 “(3) *ELECTRICITY INTENSIVE PRODUCT.*—The
6 term ‘electricity intensive product’ means a product
7 with respect to which the cost of electricity consumed
8 in the production of the product represents more than
9 5 percent of the value of the product.

10 “(4) *EMISSION ALLOWANCE.*—The term ‘emission
11 allowance’ means a limited authorization to emit in
12 accordance with this title—

13 “(A) 1 ton of sulfur dioxide;

14 “(B) 1 ton of nitrogen oxides; or

15 “(C) 1 ton of carbon dioxide.

16 “(5) *ENERGY EFFICIENCY PROJECT.*—The term
17 ‘energy efficiency project’ means any specific action
18 (other than ownership or operation of an energy effi-
19 cient building) commenced after the date of enactment
20 of this title—

21 “(A) at a facility (other than an electricity
22 generating facility), that verifiably reduces the
23 annual electricity or natural gas consumption
24 per unit output of the facility, as compared with
25 the annual electricity or natural gas consump-

tion per unit output that would be expected in the absence of an allocation of emission allowances (as determined by the Administrator); or

“(B) by an entity that is primarily engaged in the transmission and distribution of electricity, that significantly improves the efficiency of that type of entity, as compared with standards for efficiency developed by the Administrator, in consultation with the Secretary of Energy, after the date of enactment of this title.

“(6) *ENERGY EFFICIENT BUILDING*.—The term ‘energy efficient building’ means a residential building or commercial building completed after the date of enactment of this title for which the projected lifetime consumption of electricity or natural gas for heating, cooling, and ventilation is at least 30 percent less than the lifetime consumption of a typical new residential building or commercial building, as determined by the Administrator (in consultation with the Secretary of Energy)—

“(A) on a State or regional basis; and

“(B) taking into consideration—

“(i) applicable building codes; and

“(ii) consumption levels achieved in practice by new residential buildings or

1 *commercial buildings in the absence of an*
 2 *allocation of emission allowances.*

3 “(7) *ENERGY EFFICIENT PRODUCT.*—*The term*
 4 *‘energy efficient product’ means a product manufac-*
 5 *tured after the date of enactment of this title that has*
 6 *an expected lifetime electricity or natural gas con-*
 7 *sumption that—*

8 “(A) *is less than the average lifetime elec-*
 9 *tricity or natural gas consumption for that type*
 10 *of product; and*

11 “(B) *does not exceed the lesser of—*

12 “(i) *the maximum energy consumption*
 13 *that qualifies for the applicable Energy*
 14 *Star label for that type of product; or*

15 “(ii) *the average energy consumption*
 16 *of the most efficient 25 percent of that type*
 17 *of product manufactured in the same year.*

18 “(8) *LIFETIME.*—*The term ‘lifetime’ means—*

19 “(A) *in the case of a residential building*
 20 *that is an energy efficient building, 30 years;*

21 “(B) *in the case of a commercial building*
 22 *that is an energy efficient building, 15 years;*
 23 *and*

24 “(C) *in the case of an energy efficient prod-*
 25 *uct, a period determined by the Administrator to*

1 *be the average life of that type of energy efficient*
 2 *product.*

3 “(9) *MERCURY.*—*The term ‘mercury’ includes*
 4 *any mercury compound.*

5 “(10) *NEW CLEAN FOSSIL FUEL-FIRED ELEC-*
 6 *TRICITY GENERATING UNIT.*—*The term ‘new clean fos-*
 7 *sil fuel-fired electricity generating unit’ means a unit*
 8 *that—*

9 “(A) *has been in operation for 10 years or*
 10 *less; and*

11 “(B) *is—*

12 “(i) *a natural gas fired generator*
 13 *that—*

14 “(I) *has an energy conversion effi-*
 15 *ciency of at least 55 percent; and*

16 “(II) *uses best available control*
 17 *technology (as defined in section 169);*

18 “(ii) *a generator that—*

19 “(I) *uses integrated gasification*
 20 *combined cycle technology;*

21 “(II) *uses best available control*
 22 *technology (as defined in section 169);*
 23 *and*

24 “(III) *has an energy conversion*
 25 *efficiency of at least 45 percent; or*

1 “(iii) a fuel cell operating on fuel de-
2 rived from a nonrenewable source of energy.

3 “(11) NONWESTERN REGION.—The term
4 ‘nonwestern region’ means the area of the States that
5 is not included in the western region.

6 “(12) RENEWABLE ELECTRICITY GENERATING
7 UNIT.—The term ‘renewable electricity generating
8 unit’ means a unit that—

9 “(A) has been in operation for 10 years or
10 less; and

11 “(B) generates electric energy by means
12 of—

13 “(i) wind;

14 “(ii) biomass;

15 “(iii) landfill gas;

16 “(iv) a geothermal, solar thermal, or
17 photovoltaic source; or

18 “(v) a fuel cell operating on fuel de-
19 rived from a renewable source of energy.

20 “(13) SMALL ELECTRICITY GENERATING FACIL-
21 ITY.—The term ‘small electricity generating facility’
22 means an electric or thermal electricity generating
23 unit, or combination of units, that—

24 “(A) has a nameplate capacity of less than
25 15 megawatts (or the equivalent in thermal en-

1 *ergy generation, determined in accordance with*
 2 *a methodology developed by the Administrator);*

3 *“(B) generates electric energy, for sale,*
 4 *through combustion of fossil fuel; and*

5 *“(C) emits a covered pollutant into the at-*
 6 *mosphere.*

7 *“(14) WESTERN REGION.—The term ‘western re-*
 8 *gion’ means the area comprising the States of Ari-*
 9 *zona, California, Colorado, Idaho, Montana, Nevada,*
 10 *New Mexico, Oregon, Utah, Washington, and Wyo-*
 11 *ming.*

12 **“SEC. 704. EMISSION LIMITATIONS.**

13 *“(a) IN GENERAL.—Subject to subsections (b) and (c),*
 14 *the Administrator shall promulgate regulations to ensure*
 15 *that, during 2008 and each year thereafter, the total annual*
 16 *emissions of covered pollutants from all electricity gener-*
 17 *ating facilities located in all States does not exceed—*

18 *“(1) in the case of sulfur dioxide—*

19 *“(A) 275,000 tons in the western region; or*

20 *“(B) 1,975,000 tons in the nonwestern re-*
 21 *gion;*

22 *“(2) in the case of nitrogen oxides, 1,510,000*
 23 *tons;*

24 *“(3) in the case of carbon dioxide, 2,050,000,000*
 25 *tons; or*

1 “(4) *in the case of mercury, 5 tons.*

2 “(b) *EXCESS EMISSIONS BASED ON UNUSED ALLOW-*
 3 *ANCES.—The regulations promulgated under subsection (a)*
 4 *shall authorize emissions of covered pollutants in excess of*
 5 *the national emission limitations established under that*
 6 *subsection for a year to the extent that the number of tons*
 7 *of the excess emissions is less than or equal to the number*
 8 *of emission allowances that are—*

9 “(1) *used in the year; but*

10 “(2) *allocated for any previous year under sec-*
 11 *tion 707.*

12 “(c) *REDUCTIONS.—For 2008 and each year there-*
 13 *after, the quantity of emissions specified for each covered*
 14 *pollutant in subsection (a) shall be reduced by the sum of—*

15 “(1) *the number of tons of the covered pollutant*
 16 *that were emitted by small electricity generating fa-*
 17 *cilities in the second preceding year; and*

18 “(2) *any number of tons of reductions in emis-*
 19 *sions of the covered pollutant required under section*
 20 *705(h).*

21 **“SEC. 705. EMISSION ALLOWANCES.**

22 “(a) *CREATION AND ALLOCATION.—*

23 “(1) *IN GENERAL.—For 2008 and each year*
 24 *thereafter, subject to paragraph (2), there are created,*

1 *and the Administrator shall allocate in accordance*
 2 *with section 707, emission allowances as follows:*

3 “(A) *In the case of sulfur dioxide—*

4 “(i) *275,000 emission allowances for*
 5 *each year for use in the western region; and*

6 “(ii) *1,975,000 emission allowances for*
 7 *each year for use in the nonwestern region.*

8 “(B) *In the case of nitrogen oxides,*
 9 *1,510,000 emission allowances for each year.*

10 “(C) *In the case of carbon dioxide,*
 11 *2,050,000,000 emission allowances for each year.*

12 “(2) *REDUCTIONS.—For 2008 and each year*
 13 *thereafter, the number of emission allowances speci-*
 14 *fied for each covered pollutant in paragraph (1) shall*
 15 *be reduced by a number equal to the sum of—*

16 “(A) *the number of tons of the covered pol-*
 17 *lutant that were emitted by small electricity gen-*
 18 *erating facilities in the second preceding year;*
 19 *and*

20 “(B) *any number of tons of reductions in*
 21 *emissions of the covered pollutant required under*
 22 *subsection (h).*

23 “(b) *NATURE OF EMISSION ALLOWANCES.—*

1 “(1) *NOT A PROPERTY RIGHT.*—*An emission al-*
 2 *lowance allocated by the Administrator under sub-*
 3 *section (a) is not a property right.*

4 “(2) *NO LIMIT ON AUTHORITY TO TERMINATE OR*
 5 *LIMIT.*—*Nothing in this title or any other provision*
 6 *of law limits the authority of the United States to ter-*
 7 *minate or limit an emission allowance.*

8 “(3) *TRACKING AND TRANSFER OF EMISSION AL-*
 9 *LOWANCES.*—

10 “(A) *IN GENERAL.*—*Not later than 1 year*
 11 *after the date of enactment of this title, the Ad-*
 12 *ministrator shall promulgate regulations to es-*
 13 *tablish an emission allowance tracking and*
 14 *transfer system for emission allowances of sulfur*
 15 *dioxide, nitrogen oxides, and carbon dioxide.*

16 “(B) *REQUIREMENTS.*—*The emission allow-*
 17 *ance tracking and transfer system established*
 18 *under subparagraph (A) shall—*

19 “(i) *incorporate the requirements of*
 20 *subsections (b) and (d) of section 412*
 21 *(except that written certification by the*
 22 *transferee shall not be necessary to effect a*
 23 *transfer); and*

24 “(ii) *permit any entity—*

1 “(I) to buy, sell, or hold an emis-
2 sion allowance; and

3 “(II) to permanently retire an
4 unused emission allowance.

5 “(C) *PROCEEDS OF TRANSFERS.*—*Proceeds*
6 *from the transfer of emission allowances by any*
7 *person to which the emission allowances have*
8 *been allocated—*

9 “(i) shall not constitute funds of the
10 *United States; and*

11 “(ii) shall not be available to meet any
12 *obligations of the United States.*

13 “(c) *IDENTIFICATION AND USE.*—

14 “(1) *IN GENERAL.*—*Each emission allowance al-*
15 *located by the Administrator shall bear a unique se-*
16 *rial number, including—*

17 “(A) *an identifier of the covered pollutant*
18 *to which the emission allowance pertains; and*

19 “(B) *the first year for which the allowance*
20 *may be used.*

21 “(2) *SULFUR DIOXIDE EMISSION ALLOWANCES.*—
22 *In the case of sulfur dioxide emission allowances, the*
23 *Administrator shall ensure that the emission allow-*
24 *ances allocated to electricity generating facilities in*
25 *the western region are distinguishable from emission*

1 *allowances allocated to electricity generating facilities*
 2 *in the nonwestern region.*

3 “(3) *YEAR OF USE.*—*Each emission allowance*
 4 *may be used in the year for which the emission allow-*
 5 *ance is allocated or in any subsequent year.*

6 “(d) *ANNUAL SUBMISSION OF EMISSION ALLOW-*
 7 *ANCES.*—

8 “(1) *IN GENERAL.*—*On or before April 1, 2009,*
 9 *and April 1 of each year thereafter, the owner or op-*
 10 *erator of each electricity generating facility shall sub-*
 11 *mit to the Administrator 1 emission allowance for the*
 12 *applicable covered pollutant (other than mercury) for*
 13 *each ton of sulfur dioxide, nitrogen oxides, or carbon*
 14 *dioxide emitted by the electricity generating facility*
 15 *during the previous calendar year.*

16 “(2) *SPECIAL RULE FOR OZONE*
 17 *EXCEEDANCES.*—

18 “(A) *IDENTIFICATION OF FACILITIES CON-*
 19 *TRIBUTING TO NONATTAINMENT.*—*Not later than*
 20 *December 31, 2007, and the end of each 3-year*
 21 *period thereafter, each State, consistent with the*
 22 *obligations of the State under section*
 23 *110(a)(2)(D), shall identify the electricity gener-*
 24 *ating facilities in the State and in other States*
 25 *that are significantly contributing (as deter-*

1 *mined based on guidance issued by the Adminis-*
2 *trator) to nonattainment of the national ambient*
3 *air quality standard for ozone in the State.*

4 *“(B) SUBMISSION OF ADDITIONAL ALLOW-*
5 *ANCES.—In 2008 and each year thereafter, on*
6 *petition from a State or a person demonstrating*
7 *that the control measures in effect at an elec-*
8 *tricity generating facility that is identified*
9 *under subparagraph (A) as significantly contrib-*
10 *uting to nonattainment of the national ambient*
11 *air quality standard for ozone in a State during*
12 *the previous year are inadequate to prevent the*
13 *significant contribution described in subpara-*
14 *graph (A), the Administrator, if the Adminis-*
15 *trator determines that the electricity generating*
16 *facility is inadequately controlled for nitrogen*
17 *oxides, may require that the electricity gener-*
18 *ating facility submit 3 nitrogen oxide emission*
19 *allowances for each ton of nitrogen oxides emit-*
20 *ted by the electricity generating facility during*
21 *any period of an exceedance of the national am-*
22 *bient air quality standard for ozone in the State*
23 *during the previous year.*

24 *“(3) REGIONAL LIMITATIONS FOR SULFUR DIOX-*
25 *IDE.—The Administrator shall not allow—*

1 “(A) *the use of sulfur dioxide emission al-*
 2 *lowances allocated for the western region to meet*
 3 *the obligations under this subsection of electricity*
 4 *generating facilities in the nonwestern region; or*

5 “(B) *the use of sulfur dioxide emission al-*
 6 *lowances allocated for the nonwestern region to*
 7 *meet the obligations under this subsection of elec-*
 8 *tricity generating facilities in the western region.*

9 “(e) *EMISSION VERIFICATION, MONITORING, AND REC-*
 10 *ORDKEEPING.—*

11 “(1) *IN GENERAL.—The Administrator shall en-*
 12 *sure that Federal regulations, in combination with*
 13 *any applicable State regulations, are adequate to*
 14 *verify, monitor, and document emissions of covered*
 15 *pollutants from electricity generating facilities.*

16 “(2) *INVENTORY OF EMISSIONS FROM SMALL*
 17 *ELECTRICITY GENERATING FACILITIES.—On or before*
 18 *January 1, 2004, the Administrator, in cooperation*
 19 *with State agencies, shall complete, and on an annual*
 20 *basis update, a comprehensive inventory of emissions*
 21 *of sulfur dioxide, nitrogen oxides, carbon dioxide, and*
 22 *particulate matter from small electricity generating*
 23 *facilities.*

24 “(3) *MONITORING INFORMATION.—*

1 “(A) *IN GENERAL.*—Not later than 180
 2 *days after the date of enactment of this title, the*
 3 *Administrator shall promulgate regulations to*
 4 *require each electricity generating facility to sub-*
 5 *mit to the Administrator—*

6 “(i) *not later than April 1 of each*
 7 *year, verifiable information on covered pol-*
 8 *lutants emitted by the electricity generating*
 9 *facility in the previous year, expressed in—*

10 “(I) *tons of covered pollutants;*

11 *and*

12 “(II) *tons of covered pollutants*
 13 *per megawatt hour of energy (or the*
 14 *equivalent thermal energy) generated;*
 15 *and*

16 “(ii) *as part of the first submission*
 17 *under clause (i), verifiable information on*
 18 *covered pollutants emitted by the electricity*
 19 *generating facility in 1999, 2000, and 2001,*
 20 *if the electricity generating facility was re-*
 21 *quired to report that information in those*
 22 *years.*

23 “(B) *SOURCE OF INFORMATION.*—*Informa-*
 24 *tion submitted under subparagraph (A) shall be*

1 *obtained using a continuous emission moni-*
 2 *toring system (as defined in section 402).*

3 “(C) *AVAILABILITY TO THE PUBLIC.—The*
 4 *information described in subparagraph (A) shall*
 5 *be made available to the public—*

6 “(i) *in the case of the first year in*
 7 *which the information is required to be sub-*
 8 *mitted under that subparagraph, not later*
 9 *than 18 months after the date of enactment*
 10 *of this title; and*

11 “(ii) *in the case of each year thereafter,*
 12 *not later than April 1 of the year.*

13 “(4) *AMBIENT AIR QUALITY MONITORING FOR*
 14 *SULFUR DIOXIDE AND HAZARDOUS AIR POLLUT-*
 15 *ANTS.—*

16 “(A) *IN GENERAL.—Beginning January 1,*
 17 *2004, each coal-fired electricity generating facil-*
 18 *ity with an aggregate generating capacity of 50*
 19 *megawatts or more shall, in accordance with*
 20 *guidelines issued by the Administrator, com-*
 21 *mence ambient air quality monitoring within a*
 22 *30-mile radius of the coal-fired electricity gener-*
 23 *ating facility for the purpose of measuring max-*
 24 *imum concentrations of sulfur dioxide and haz-*

ardous air pollutants emitted by the coal-fired
electricity generating facility.

“(B) *LOCATION OF MONITORING POINTS.*—
Monitoring under subparagraph (A) shall in-
clude monitoring at not fewer than 2 points—

“(i) that are at ground level and with-
in 3 miles of the coal-fired electricity gener-
ating facility;

“(ii) at which the concentration of pol-
lutants being monitored is expected to be the
greatest; and

“(iii) at which the monitoring shall be
the most frequent.

“(C) *FREQUENCY OF MONITORING OF SUL-
FUR DIOXIDE.*—Monitoring of sulfur dioxide
under subparagraph (A) shall be carried out on
a continuous basis and averaged over 5-minute
periods.

“(D) *AVAILABILITY TO THE PUBLIC.*—The
results of the monitoring under subparagraph
(A) shall be made available to the public.

“(f) *EXCESS EMISSION PENALTY.*—

“(1) *IN GENERAL.*—Subject to paragraph (2),
section 411 shall be applicable to an owner or oper-
ator of an electricity generating facility.

1 “(2) *CALCULATION OF PENALTY.*—

2 “(A) *IN GENERAL.*—*Except as provided in*
 3 *subparagraph (B), the penalty for failure to sub-*
 4 *mit emission allowances for covered pollutants as*
 5 *required under subsection (d) shall be equal to 3*
 6 *times the product obtained by multiplying—*

7 “(i) *as applicable—*

8 “(I) *the number of tons emitted in*
 9 *excess of the emission limitation re-*
 10 *quirement applicable to the electricity*
 11 *generating facility; or*

12 “(II) *the number of emission al-*
 13 *lowances that the owner or operator*
 14 *failed to submit; and*

15 “(ii) *the average annual market price*
 16 *of emission allowances (as determined by*
 17 *the Administrator).*

18 “(B) *MERCURY.*—*In the case of mercury,*
 19 *the penalty shall be equal to 3 times the product*
 20 *obtained by multiplying—*

21 “(i) *the number of grams emitted in*
 22 *excess of the emission limitation require-*
 23 *ment for mercury applicable to the elec-*
 24 *tricity generating facility; and*

1 “(ii) the average cost of mercury con-
 2 trols at electricity generating units that
 3 have a nameplate capacity of 15 megawatts
 4 or more in all States (as determined by the
 5 Administrator).

6 “(g) *SIGNIFICANT ADVERSE LOCAL IMPACTS.*—

7 “(1) *IN GENERAL.*—If the Administrator deter-
 8 mines that emissions of an electricity generating fa-
 9 cility may reasonably be anticipated to cause or con-
 10 tribute to a significant adverse impact on an area
 11 (including endangerment of public health, contribu-
 12 tion to acid deposition in a sensitive receptor area,
 13 and other degradation of the environment), the Ad-
 14 ministrator shall limit the emissions of the electricity
 15 generating facility as necessary to avoid that impact.

16 “(2) *VIOLATION.*—Notwithstanding the avail-
 17 ability of emission allowances, it shall be a violation
 18 of this Act for any electricity generating facility to
 19 exceed any limitation on emissions established under
 20 paragraph (1).

21 “(h) *ADDITIONAL REDUCTIONS.*—

22 “(1) *PROTECTION OF PUBLIC HEALTH OR WEL-*
 23 *FARE OR THE ENVIRONMENT.*—If the Administrator
 24 determines that the emission levels necessary to
 25 achieve the national emission limitations established

1 *under section 704 are not reasonably anticipated to*
 2 *protect public health or welfare or the environment*
 3 *(including protection of children, pregnant women,*
 4 *minority or low-income communities, and other sen-*
 5 *sitive populations), the Administrator may require*
 6 *reductions in emissions from electricity generating fa-*
 7 *cilities in addition to the reductions required under*
 8 *the other provisions of this title.*

9 “(2) *EMISSION ALLOWANCE TRADING.*—

10 “(A) *STUDIES.*—

11 “(i) *IN GENERAL.*—*In 2011 and at the*
 12 *end of each 3-year period thereafter, the Ad-*
 13 *ministrator shall complete a study of the*
 14 *impacts of the emission allowance trading*
 15 *authorized under this title.*

16 “(ii) *REQUIRED ASSESSMENT.*—*The*
 17 *study shall include an assessment of ambi-*
 18 *ent air quality in areas surrounding elec-*
 19 *tricity generating facilities that participate*
 20 *in emission allowance trading, including a*
 21 *comparison between—*

22 “(I) *the ambient air quality in*
 23 *those areas; and*

24 “(II) *the national average ambi-*
 25 *ent air quality.*

1 “(B) *LIMITATION ON EMISSIONS.*—If the
 2 Administrator determines, based on the results of
 3 a study under subparagraph (A), that adverse
 4 local impacts result from emission allowance
 5 trading, the Administrator may require reduc-
 6 tions in emissions from electricity generating fa-
 7 cilities in addition to the reductions required
 8 under the other provisions of this title.

9 “(i) *USE OF CERTAIN OTHER EMISSION ALLOW-*
 10 *ANCES.*—

11 “(1) *IN GENERAL.*—Subject to paragraph (2),
 12 emission allowances or other emission trading instru-
 13 ments created under title I or IV for sulfur dioxide
 14 or nitrogen oxides shall not be valid for submission
 15 under subsection (d).

16 “(2) *EMISSION ALLOWANCES PLACED IN RE-*
 17 *SERVE.*—

18 “(A) *IN GENERAL.*—Except as provided in
 19 subparagraph (B), an emission allowance de-
 20 scribed in paragraph (1) that was placed in re-
 21 serve under section 404(a)(2) or 405 or through
 22 regulations implementing controls on nitrogen
 23 oxides, because an affected unit emitted fewer
 24 tons of sulfur dioxide or nitrogen oxides than
 25 were permitted under an emission limitation im-

posed under title I or IV before the date of enactment of this title, shall be considered to be equivalent to $\frac{1}{4}$ of an emission allowance created by subsection (a) for sulfur dioxide or nitrogen oxides, respectively.

“(B) *EMISSION ALLOWANCES RESULTING FROM ACHIEVEMENT OF NEW SOURCE PERFORMANCE STANDARDS.*—If an emission allowance described in subparagraph (A) was created and placed in reserve during the period of 2000 through 2007 by the owner or operator of an electricity generating facility through the application of pollution control technology that resulted in the achievement and maintenance by the electricity generating facility of the applicable standards of performance required of new sources under section 111, the emission allowance shall be valid for submission under subsection (d).

“**SEC. 706. PERMITTING AND TRADING OF EMISSION ALLOWANCES.**

“(a) *IN GENERAL.*—Not later than 1 year after the date of enactment of this title, the Administrator shall promulgate regulations to establish a permitting and emission allowance trading compliance program to implement the

1 *limitations on emissions of covered pollutants from elec-*
 2 *tricity generating facilities established under section 704.*

3 “(b) *EMISSION ALLOWANCE TRADING WITH FACILI-*
 4 *TIES OTHER THAN ELECTRICITY GENERATING FACILI-*
 5 *TIES.*—

6 “(1) *IN GENERAL.*—Subject to paragraph (2)
 7 *and section 705(i), the regulations promulgated to es-*
 8 *tablish the program under subsection (a) shall pro-*
 9 *hibit use of emission allowances generated from other*
 10 *emission control programs for the purpose of dem-*
 11 *onstrating compliance with the limitations on emis-*
 12 *sions of covered pollutants from electricity generating*
 13 *facilities established under section 704.*

14 “(2) *EXCEPTION FOR CERTAIN CARBON DIOXIDE*
 15 *EMISSION CONTROL PROGRAMS.*—The prohibition de-
 16 scribed in paragraph (1) shall not apply in the case
 17 of carbon dioxide emission allowances generated from
 18 an emission control program that limits total carbon
 19 dioxide emissions from the entirety of any industrial
 20 sector.

21 “(c) *METHODOLOGY.*—The program established under
 22 subsection (a) shall clearly identify the methodology for the
 23 allocation of emission allowances, including standards for
 24 measuring annual electricity generation and energy effi-
 25 ciency as the standards relate to emissions.

1 **“SEC. 707. EMISSION ALLOWANCE ALLOCATION.**

2 “(a) *ALLOCATION TO ELECTRICITY CONSUMERS.—*

3 “(1) *IN GENERAL.—For 2008 and each year*
 4 *thereafter, after making allocations of emission allow-*
 5 *ances under subsections (b) through (f), the Adminis-*
 6 *trator shall allocate the remaining emission allow-*
 7 *ances created by section 705(a) for the year for each*
 8 *covered pollutant other than mercury to households*
 9 *served by electricity.*

10 “(2) *ALLOCATION AMONG HOUSEHOLDS.—The*
 11 *allocation to each household shall reflect—*

12 “(A) *the number of persons residing in the*
 13 *household; and*

14 “(B) *the ratio that—*

15 “(i) *the quantity of the residential elec-*
 16 *tricity consumption of the State in which*
 17 *the household is located; bears to*

18 “(ii) *the quantity of the residential*
 19 *electricity consumption of all States.*

20 “(3) *REGULATIONS.—Not later than 1 year after*
 21 *the date of enactment of this title, the Administrator*
 22 *shall promulgate regulations making appropriate ar-*
 23 *rangements for the allocation of emission allowances*
 24 *to households under this subsection, including as nec-*
 25 *essary the appointment of 1 or more trustees—*

1 “(A) to receive the emission allowances for
2 the benefit of the households;

3 “(B) to obtain fair market value for the
4 emission allowances; and

5 “(C) to distribute the proceeds to the bene-
6 ficiaries.

7 “(b) *ALLOCATION FOR TRANSITION ASSISTANCE.*—

8 “(1) *IN GENERAL.*—For 2008 and each year
9 thereafter through 2017, the Administrator shall allo-
10 cate the percentage specified in paragraph (2) of the
11 emission allowances created by section 705(a) for the
12 year for each covered pollutant other than mercury in
13 the following manner:

14 “(A) 80 percent shall be allocated to provide
15 transition assistance to—

16 “(i) dislocated workers (as defined in
17 section 101 of the Workforce Investment Act
18 of 1998 (29 U.S.C. 2801)) whose employ-
19 ment has been terminated or who have been
20 laid off as a result of the emission reduc-
21 tions required by this title; and

22 “(ii) communities that have experi-
23 enced disproportionate adverse economic
24 impacts as a result of the emission reduc-
25 tions required by this title.

1 “(B) 20 percent shall be allocated to pro-
 2 ducers of electricity intensive products in a num-
 3 ber equal to the product obtained by multi-
 4 plying—

5 “(i) the ratio that—

6 “(I) the quantity of each elec-
 7 tricity intensive product produced by
 8 each producer in the previous year;
 9 bears to

10 “(II) the quantity of the elec-
 11 tricity intensive product produced by
 12 all producers in the previous year;

13 “(ii) the average quantity of electricity
 14 used in producing the electricity intensive
 15 product by producers that use the most en-
 16 ergy efficient process for producing the elec-
 17 tricity intensive product; and

18 “(iii) with respect to the previous year,
 19 the national average quantity (expressed in
 20 tons) of emissions of each such pollutant per
 21 megawatt hour of electricity generated by
 22 electricity generating facilities in all States.

23 “(2) SPECIFIED PERCENTAGES.—The percentages
 24 referred to in paragraph (1) are—

25 “(A) in the case of 2008, 6 percent;

1 “(B) in the case of 2009, 5.5 percent;

2 “(C) in the case of 2010, 5 percent;

3 “(D) in the case of 2011, 4.5 percent;

4 “(E) in the case of 2012, 4 percent;

5 “(F) in the case of 2013, 3.5 percent;

6 “(G) in the case of 2014, 3 percent;

7 “(H) in the case of 2015, 2.5 percent;

8 “(I) in the case of 2016, 2 percent; and

9 “(J) in the case of 2017, 1.5 percent.

10 “(3) *REGULATIONS FOR ALLOCATION FOR TRAN-*
 11 *SITION ASSISTANCE TO DISLOCATED WORKERS AND*
 12 *COMMUNITIES.—*

13 “(A) *IN GENERAL.—Not later than 1 year*
 14 *after the date of enactment of this title, the Ad-*
 15 *ministrator shall promulgate regulations making*
 16 *appropriate arrangements for the distribution of*
 17 *emission allowances under paragraph (1)(A), in-*
 18 *cluding as necessary the appointment of 1 or*
 19 *more trustees—*

20 “(i) *to receive the emission allowances*
 21 *allocated under paragraph (1)(A) for the*
 22 *benefit of the dislocated workers and com-*
 23 *munities;*

24 “(ii) *to obtain fair market value for*
 25 *the emission allowances; and*

1 “(iii) to apply the proceeds to pro-
 2 viding transition assistance to the dis-
 3 located workers and communities.

4 “(B) *FORM OF TRANSITION ASSISTANCE.*—
 5 Transition assistance under paragraph (1)(A)
 6 may take the form of—

7 “(i) grants to employers, employer as-
 8 sociations, and representatives of employ-
 9 ees—

10 “(I) to provide training, adjust-
 11 ment assistance, and employment serv-
 12 ices to dislocated workers; and

13 “(II) to make income-mainte-
 14 nance and needs-related payments to
 15 dislocated workers; and

16 “(ii) grants to States and local govern-
 17 ments to assist communities in attracting
 18 new employers or providing essential local
 19 government services.

20 “(c) *ALLOCATION TO RENEWABLE ELECTRICITY GEN-*
 21 *ERATING UNITS, EFFICIENCY PROJECTS, AND CLEANER*
 22 *ENERGY SOURCES.*—For 2008 and each year thereafter, the
 23 Administrator shall allocate not more than 20 percent of
 24 the emission allowances created by section 705(a) for the
 25 year for each covered pollutant other than mercury—

1 “(1) to owners and operators of renewable elec-
2 tricity generating units, in a number equal to the
3 product obtained by multiplying—

4 “(A) the number of megawatt hours of elec-
5 tricity generated in the previous year by each re-
6 newable electricity generating unit; and

7 “(B) with respect to the previous year, the
8 national average quantity (expressed in tons) of
9 emissions of each such pollutant per megawatt
10 hour of electricity generated by electricity gener-
11 ating facilities in all States;

12 “(2) to owners and operators of energy efficient
13 buildings, producers of energy efficient products, and
14 entities that carry out energy efficient projects, in a
15 number equal to the product obtained by multi-
16 plying—

17 “(A) the number of megawatt hours of elec-
18 tricity or cubic feet of natural gas saved in the
19 previous year as a result of each energy efficient
20 building, energy efficient product, or energy effi-
21 ciency project; and

22 “(B) with respect to the previous year, the
23 national average quantity (expressed in tons) of
24 emissions of each such pollutant per, as appro-
25 priate—

1 “(i) megawatt hour of electricity gen-
 2 erated by electricity generating facilities in
 3 all States; or

4 “(ii) cubic foot of natural gas burned
 5 for a purpose other than generation of elec-
 6 tricity in all States;

7 “(3) to owners and operators of new clean fossil
 8 fuel-fired electricity generating units, in a number
 9 equal to the product obtained by multiplying—

10 “(A) the number of megawatt hours of elec-
 11 tricity generated in the previous year by each
 12 new clean fossil fuel-fired electricity generating
 13 unit; and

14 “(B) with respect to the previous year, $\frac{1}{2}$ of
 15 the national average quantity (expressed in tons)
 16 of emissions of each such pollutant per megawatt
 17 hour of electricity generated by electricity gener-
 18 ating facilities in all States; and

19 “(4) to owners and operators of combined heat
 20 and power electricity generating facilities, in a num-
 21 ber equal to the product obtained by multiplying—

22 “(A) the number of British thermal units of
 23 thermal energy produced and put to productive
 24 use in the previous year by each combined heat
 25 and power electricity generating facility; and

1 “(B) with respect to the previous year, the
 2 national average quantity (expressed in tons) of
 3 emissions of each such pollutant per British ther-
 4 mal unit of thermal energy generated by elec-
 5 tricity generating facilities in all States.

6 “(d) *TRANSITION ASSISTANCE TO ELECTRICITY GEN-*
 7 *ERATING FACILITIES.*—

8 “(1) *IN GENERAL.*—For 2008 and each year
 9 thereafter through 2017, the Administrator shall allo-
 10 cate the percentage specified in paragraph (2) of the
 11 emission allowances created by section 705(a) for the
 12 year for each covered pollutant other than mercury to
 13 the owners or operators of electricity generating facili-
 14 ties in the ratio that—

15 “(A) the quantity of electricity generated by
 16 each electricity generating facility in 2000; bears
 17 to

18 “(B) the quantity of electricity generated by
 19 all electricity generating facilities in 2000.

20 “(2) *SPECIFIED PERCENTAGES.*—The percentages
 21 referred to in paragraph (1) are—

22 “(A) in the case of 2008, 10 percent;

23 “(B) in the case of 2009, 9 percent;

24 “(C) in the case of 2010, 8 percent;

25 “(D) in the case of 2011, 7 percent;

1 “(E) in the case of 2012, 6 percent;
 2 “(F) in the case of 2013, 5 percent;
 3 “(G) in the case of 2014, 4 percent;
 4 “(H) in the case of 2015, 3 percent;
 5 “(I) in the case of 2016, 2 percent; and
 6 “(J) in the case of 2017, 1 percent.

7 “(e) *ALLOCATION TO ENCOURAGE BIOLOGICAL CAR-*
 8 *BON SEQUESTRATION.*—

9 “(1) *IN GENERAL.*—*For 2008 and each year*
 10 *thereafter, the Administrator shall allocate, on a com-*
 11 *petitive basis and in accordance with paragraphs (2)*
 12 *and (3), not more than 0.075 percent of the carbon*
 13 *dioxide emission allowances created by section 705(a)*
 14 *for the year for the purposes of—*

15 “(A) *carrying out projects to reduce net car-*
 16 *bon dioxide emissions through biological carbon*
 17 *dioxide sequestration in the United States that—*

18 “(i) *result in benefits to watersheds*
 19 *and fish and wildlife habitats; and*

20 “(ii) *are conducted in accordance with*
 21 *project reporting, monitoring, and*
 22 *verification guidelines based on—*

23 “(I) *measurement of increases in*
 24 *carbon storage in excess of the carbon*

1 *storage that would have occurred in the*
2 *absence of such a project;*

3 *“(II) comprehensive carbon ac-*
4 *counting that—*

5 *“(aa) reflects net increases in*
6 *carbon reservoirs; and*

7 *“(bb) takes into account any*
8 *carbon emissions resulting from*
9 *disturbance of carbon reservoirs in*
10 *existence as of the date of com-*
11 *mencement of the project;*

12 *“(III) adjustments to account*
13 *for—*

14 *“(aa) emissions of carbon*
15 *that may result at other locations*
16 *as a result of the impact of the*
17 *project on timber supplies; or*

18 *“(bb) potential displacement*
19 *of carbon emissions to other land*
20 *owned by the entity that carries*
21 *out the project; and*

22 *“(IV) adjustments to reflect the*
23 *expected carbon storage over various*
24 *time periods, taking into account the*
25 *likely duration of the storage of the*

1 *carbon stored in a carbon reservoir;*
 2 *and*

3 “(B) *conducting accurate inventories of car-*
 4 *bon sinks.*

5 “(2) *CARBON INVENTORY.—The Administrator,*
 6 *in consultation with the Secretary of Agriculture,*
 7 *shall allocate not more than $\frac{1}{3}$ of the emission allow-*
 8 *ances described in paragraph (1) to not more than 5*
 9 *State or multistate land or forest management agen-*
 10 *cies or nonprofit entities that—*

11 “(A) *have a primary goal of land conserva-*
 12 *tion; and*

13 “(B) *submit to the Administrator proposals*
 14 *for projects—*

15 “(i) *to demonstrate and assess the po-*
 16 *tential for the development and use of car-*
 17 *bon inventorying and accounting systems;*

18 “(ii) *to improve the standards relating*
 19 *to, and the identification of, incremental*
 20 *carbon sequestration in forests, agricultural*
 21 *soil, grassland, or rangeland; or*

22 “(iii) *to assist in development of a na-*
 23 *tional biological carbon storage baseline or*
 24 *inventory.*

1 “(3) *REVOLVING LOAN PROGRAM.*—*The Adminis-*
 2 *trator shall allocate not more than $\frac{2}{3}$ of the emission*
 3 *allowances described in paragraph (1) to States,*
 4 *based on proposals submitted by States to conduct*
 5 *programs under which each State shall—*

6 “(A) *use the value of the emission allow-*
 7 *ances to establish a State revolving loan fund to*
 8 *provide loans to owners of nonindustrial private*
 9 *forest land in the State to carry out forest and*
 10 *forest soil carbon sequestration activities that*
 11 *will achieve the purposes specified in paragraph*
 12 *(2)(B); and*

13 “(B) *for 2009 and each year thereafter, con-*
 14 *tribute to the program of the State an amount*
 15 *equal to 25 percent of the value of the emission*
 16 *allowances received under this paragraph for the*
 17 *year in cash, in-kind services, or technical assist-*
 18 *ance.*

19 “(4) *USE OF EMISSION ALLOWANCES.*—*An entity*
 20 *that receives an allocation of emission allowances*
 21 *under this subsection may use the proceeds from the*
 22 *sale or other transfer of the emission allowances only*
 23 *for the purpose of carrying out activities described in*
 24 *this subsection.*

1 “(5) *RECOMMENDATIONS CONCERNING CARBON*
2 *DIOXIDE EMISSION ALLOWANCES.*—

3 “(A) *IN GENERAL.*—*Not later than 4 years*
4 *after the date of enactment of this title, the Ad-*
5 *ministrator, in consultation with the Secretary*
6 *of Agriculture, shall submit to Congress rec-*
7 *ommendations for establishing a system under*
8 *which entities that receive grants or loans under*
9 *this section may be allocated carbon dioxide*
10 *emission allowances created by section 705(a) for*
11 *incremental carbon sequestration in forests, agri-*
12 *cultural soils, rangeland, or grassland.*

13 “(B) *GUIDELINES.*—*The recommendations*
14 *shall include recommendations for development,*
15 *reporting, monitoring, and verification guide-*
16 *lines for quantifying net carbon sequestration*
17 *from land use projects that address the elements*
18 *specified in paragraph (1)(A).*

19 “(f) *ALLOCATION TO ENCOURAGE GEOLOGICAL CAR-*
20 *BON SEQUESTRATION.*—

21 “(1) *IN GENERAL.*—*For 2008 and each year*
22 *thereafter, the Administrator shall allocate not more*
23 *than 1.5 percent of the carbon dioxide emission allow-*
24 *ances created by section 705(a) to entities that carry*
25 *out geological sequestration of carbon dioxide pro-*

1 *duced by an electric generating facility in accordance*
 2 *with requirements established by the Administrator—*

3 *“(A) to ensure the permanence of the seques-*
 4 *tration; and*

5 *“(B) to ensure that the sequestration will*
 6 *not cause or contribute to significant adverse ef-*
 7 *fects on the environment.*

8 *“(2) NUMBER OF EMISSION ALLOWANCES.—For*
 9 *2008 and each year thereafter, the Administrator*
 10 *shall allocate to each entity described in paragraph*
 11 *(1) a number of emission allowances that is equal to*
 12 *the number of tons of carbon dioxide produced by the*
 13 *electric generating facility during the previous year*
 14 *that is geologically sequestered as described in para-*
 15 *graph (1).*

16 *“(3) USE OF EMISSION ALLOWANCES.—An entity*
 17 *that receives an allocation of emission allowances*
 18 *under this subsection may use the proceeds from the*
 19 *sale or other transfer of the emission allowances only*
 20 *for the purpose of carrying out activities described in*
 21 *this subsection.*

22 **“SEC. 708. MERCURY EMISSION LIMITATIONS.**

23 *“(a) IN GENERAL.—*

24 *“(1) REGULATIONS.—*

1 “(A) *IN GENERAL.*—Not later than 1 year
 2 after the date of enactment of this title, the Ad-
 3 ministrators shall promulgate regulations to es-
 4 tablish emission limitations for mercury emis-
 5 sions by coal-fired electricity generating facili-
 6 ties.

7 “(B) *NO EXCEEDANCE OF NATIONAL LIMITA-*
 8 *TION.*—The regulations shall ensure that the na-
 9 tional limitation for mercury emissions from
 10 each coal-fired electricity generating facility es-
 11 tablished under section 704(a)(4) is not exceeded.

12 “(C) *EMISSION LIMITATIONS FOR 2008 AND*
 13 *THEREAFTER.*—In carrying out subparagraph
 14 (A), for 2008 and each year thereafter, the Ad-
 15 ministrators shall not—

16 “(i) subject to subsections (e) and (f) of
 17 section 112, establish limitations on emis-
 18 sions of mercury from coal-fired electricity
 19 generating facilities that allow emissions in
 20 excess of 2.48 grams of mercury per 1000
 21 megawatt hours; or

22 “(ii) differentiate between facilities
 23 that burn different types of coal.

24 “(2) *ANNUAL REVIEW AND DETERMINATION.*—

1 “(A) *IN GENERAL.*—Not later than April 1
2 of each year, the Administrator shall—

3 “(i) *review the total mercury emissions*
4 *during the 2 previous years from electricity*
5 *generating facilities located in all States;*
6 *and*

7 “(ii) *determine whether, during the 2*
8 *previous years, the total mercury emissions*
9 *from facilities described in clause (i) exceed-*
10 *ed the national limitation for mercury*
11 *emissions established under section*
12 *704(a)(4).*

13 “(B) *EXCEEDANCE OF NATIONAL LIMITA-*
14 *TION.*—If the Administrator determines under
15 subparagraph (A)(ii) that, during the 2 previous
16 years, the total mercury emissions from facilities
17 described in subparagraph (A)(i) exceeded the
18 national limitation for mercury emissions estab-
19 lished under section 704(a)(4), the Administrator
20 shall, not later than 1 year after the date of the
21 determination, revise the regulations promul-
22 gated under paragraph (1) to reduce the emis-
23 sion rates specified in the regulations as nec-
24 essary to ensure that the national limitation for

1 *mercury emissions is not exceeded in any future*
 2 *year.*

3 *“(3) COMPLIANCE FLEXIBILITY.—*

4 *“(A) IN GENERAL.—Each coal-fired elec-*
 5 *tricity generating facility subject to an emission*
 6 *limitation under this section shall be in compli-*
 7 *ance with that limitation if that limitation is*
 8 *greater than or equal to the quotient obtained by*
 9 *dividing—*

10 *“(i) the total mercury emissions of the*
 11 *coal-fired electricity generating facility dur-*
 12 *ing each 30-day period; by*

13 *“(ii) the quantity of electricity gen-*
 14 *erated by the coal-fired electricity gener-*
 15 *ating facility during that period.*

16 *“(B) MORE THAN 1 UNIT AT A FACILITY.—*

17 *In any case in which more than 1 coal-fired elec-*
 18 *tricity generating unit at a coal-fired electricity*
 19 *generating facility subject to an emission limita-*
 20 *tion under this section was operated in 1999*
 21 *under common ownership or control, compliance*
 22 *with the emission limitation may be determined*
 23 *by averaging the emission rates of all coal-fired*
 24 *electricity generating units at the electricity gen-*
 25 *erating facility during each 30-day period.*

1 “(b) *PREVENTION OF RE-RELEASE.*—

2 “(1) *REGULATIONS.*—Not later than January 1,
3 2005, the Administrator shall promulgate regulations
4 to ensure that any mercury captured or recovered by
5 emission controls installed at an electricity generating
6 facility is not re-released into the environment.

7 “(2) *REQUIRED ELEMENTS.*—The regulations
8 shall require—

9 “(A) daily covers on all active waste dis-
10 posal units, and permanent covers on all inac-
11 tive waste disposal units, to prevent the release
12 of mercury into the air;

13 “(B) monitoring of groundwater to ensure
14 that mercury or mercury compounds do not mi-
15 grate from the waste disposal unit;

16 “(C) waste disposal siting requirements and
17 cleanup requirements to protect groundwater and
18 surface water resources;

19 “(D) elimination of agricultural applica-
20 tion of coal combustion wastes; and

21 “(E) appropriate limitations on mercury
22 emissions from sources or processes that reprocess
23 or use coal combustion waste, including manu-
24 facturers of wallboard and cement.

1 **“SEC. 709. OTHER HAZARDOUS AIR POLLUTANTS.**

2 “(a) *IN GENERAL.*—Not later than January 1, 2004,
3 *the Administrator shall issue to owners and operators of*
4 *coal-fired electricity generating facilities requests for infor-*
5 *mation under section 114 that are of sufficient scope to gen-*
6 *erate data sufficient to support issuance of standards under*
7 *section 112(d) for hazardous air pollutants other than mer-*
8 *cury emitted by coal-fired electricity generating facilities.*

9 “(b) *DEADLINE FOR SUBMISSION OF REQUESTED IN-*
10 *FORMATION.*—*The Administrator shall require each recipi-*
11 *ent of a request for information described in subsection (a)*
12 *to submit the requested data not later than 180 days after*
13 *the date of the request.*

14 “(c) *PROMULGATION OF EMISSION STANDARDS.*—*The*
15 *Administrator shall—*

16 “(1) *not later than January 1, 2005, propose*
17 *emission standards under section 112(d) for haz-*
18 *ardous air pollutants other than mercury; and*

19 “(2) *not later than January 1, 2006, promulgate*
20 *emission standards under section 112(d) for haz-*
21 *ardous air pollutants other than mercury.*

22 “(d) *PROHIBITION ON EXCESS EMISSIONS.*—*It shall*
23 *be unlawful for an electricity generating facility subject to*
24 *standards for hazardous air pollutants other than mercury*
25 *promulgated under subsection (c) to emit, after December*
26 *31, 2007, any such pollutant in excess of the standards.*

1 “(e) *EFFECT ON OTHER LAW.*—*Nothing in this section*
 2 *or section 708 affects any requirement of subsection (e),*
 3 *(f)(2), or (n)(1)(A) of section 112, except that the emission*
 4 *limitations established by regulations promulgated under*
 5 *this section shall be deemed to represent the maximum*
 6 *achievable control technology for mercury emissions from*
 7 *electricity generating units under section 112(d).*

8 **“SEC. 710. EFFECT OF FAILURE TO PROMULGATE REGULA-**
 9 **TIONS.**

10 *“If the Administrator fails to promulgate regulations*
 11 *to implement and enforce the limitations specified in sec-*
 12 *tion 704—*

13 *“(1)(A) each electricity generating facility shall*
 14 *achieve, not later than January 1, 2008, an annual*
 15 *quantity of emissions that is less than or equal to—*

16 *“(i) in the case of nitrogen oxides, 15 per-*
 17 *cent of the annual emissions by a similar elec-*
 18 *tricity generating facility that has no controls*
 19 *for emissions of nitrogen oxides; and*

20 *“(ii) in the case of carbon dioxide, 75 per-*
 21 *cent of the annual emissions by a similar elec-*
 22 *tricity generating facility that has no controls*
 23 *for emissions of carbon dioxide; and*

24 *“(B) each electricity generating facility that does*
 25 *not use natural gas as the primary combustion fuel*

1 *shall achieve, not later than January 1, 2008, an an-*
 2 *nual quantity of emissions that is less than or equal*
 3 *to—*

4 “(i) *in the case of sulfur dioxide, 5 percent*
 5 *of the annual emissions by a similar electricity*
 6 *generating facility that has no controls for emis-*
 7 *sions of sulfur dioxide; and*

8 “(ii) *in the case of mercury, 10 percent of*
 9 *the annual emissions by a similar electricity*
 10 *generating facility that has no controls included*
 11 *specifically for the purpose of controlling emis-*
 12 *sions of mercury; and*

13 “(2) *the applicable permit under this Act for*
 14 *each electricity generating facility shall be deemed to*
 15 *incorporate a requirement for achievement of the re-*
 16 *duced levels of emissions specified in paragraph (1).*

17 **“SEC. 711. PROHIBITIONS.**

18 *“It shall be unlawful—*

19 “(1) *for the owner or operator of any electricity*
 20 *generating facility—*

21 “(A) *to operate the electricity generating fa-*
 22 *cility in noncompliance with the requirements of*
 23 *this title (including any regulations imple-*
 24 *menting this title);*

1 “(B) to fail to submit by the required date
 2 any emission allowances, or pay any penalty,
 3 for which the owner or operator is liable under
 4 section 705;

5 “(C) to fail to provide and comply with any
 6 plan to offset excess emissions required under
 7 section 705(f); or

8 “(D) to emit mercury in excess of the emis-
 9 sion limitations established under section 708; or

10 “(2) for any person to hold, use, or transfer any
 11 emission allowance allocated under this title except in
 12 accordance with regulations promulgated by the Ad-
 13 ministrator.

14 **“SEC. 712. MODERNIZATION OF ELECTRICITY GENERATING**
 15 **FACILITIES.**

16 “(a) *IN GENERAL.*—Beginning on the later of January
 17 1, 2013, or the date that is 40 years after the date on which
 18 the electricity generating facility commences operation,
 19 each electricity generating facility shall be subject to emis-
 20 sion limitations reflecting the application of best available
 21 control technology on a new major source of a similar size
 22 and type (as determined by the Administrator) as deter-
 23 mined in accordance with the procedures specified in part
 24 C of title I.

1 “(b) *ADDITIONAL REQUIREMENTS.*—*The requirements*
 2 *of this section shall be in addition to the other requirements*
 3 *of this title.*

4 **“SEC. 713. RELATIONSHIP TO OTHER LAW.**

5 “(a) *IN GENERAL.*—*Except as provided in this title,*
 6 *nothing in this title—*

7 “(1) *limits or otherwise affects the application of*
 8 *any other provision of this Act; or*

9 “(2) *precludes a State from adopting and enforcing*
 10 *any requirement for the control of emissions of*
 11 *air pollutants that is more stringent than the require-*
 12 *ments imposed under this title.*

13 “(b) *REGIONAL SEASONAL EMISSION CONTROLS.*—
 14 *Nothing in this title affects any regional seasonal emission*
 15 *control for nitrogen oxides established by the Administrator*
 16 *or a State under title I.”.*

17 (b) *CONFORMING AMENDMENT.*—*Section 412(a) of the*
 18 *Clean Air Act (42 U.S.C. 7651k(a)) is amended in the first*
 19 *sentence by striking “opacity” and inserting “mercury,*
 20 *opacity,”.*

21 **SEC. 3. SAVINGS CLAUSE.**

22 *Section 193 of the Clean Air Act (42 U.S.C. 7515) is*
 23 *amended by striking “date of the enactment of the Clean*
 24 *Air Act Amendments of 1990” each place it appears and*

1 inserting “date of enactment of the Clean Power Act of
2 2002”.

3 **SEC. 4. ACID PRECIPITATION RESEARCH PROGRAM.**

4 Section 103(j) of the Clean Air Act (42 U.S.C. 7403(j))
5 is amended—

6 (1) in paragraph (3)—

7 (A) in subparagraph (F)(i), by striking
8 “effects; and” and inserting “effects, including
9 an assessment of—

10 “(I) acid-neutralizing capacity;

11 and

12 “(II) changes in the number of
13 water bodies in the sensitive ecosystems
14 referred to in subparagraph (G)(ii)
15 with an acid-neutralizing capacity
16 greater than zero; and”; and

17 (B) by adding at the end the following:

18 “(G) SENSITIVE ECOSYSTEMS.—

19 “(i) IN GENERAL.—Beginning in 2004,
20 and every 4 years thereafter, the report
21 under subparagraph (E) shall include—

22 “(I) an identification of environ-
23 mental objectives necessary to be
24 achieved (and related indicators to be
25 used in measuring achievement of the

1 *objectives) to adequately protect and*
 2 *restore sensitive ecosystems; and*

3 “(II) *an assessment of the status*
 4 *and trends of the environmental objec-*
 5 *tives and indicators identified in pre-*
 6 *vious reports under this paragraph.*

7 “(ii) *SENSITIVE ECOSYSTEMS TO BE*
 8 *ADDRESSED.—Sensitive ecosystems to be ad-*
 9 *dressed under clause (i) include—*

10 “(I) *the Adirondack Mountains,*
 11 *mid-Appalachian Mountains, Rocky*
 12 *Mountains, and southern Blue Ridge*
 13 *Mountains;*

14 “(II) *the Great Lakes, Lake*
 15 *Champlain, Long Island Sound, and*
 16 *the Chesapeake Bay; and*

17 “(III) *other sensitive ecosystems,*
 18 *as determined by the Administrator.*

19 “(H) *ACID DEPOSITION STANDARDS.—Be-*
 20 *ginning in 2004, and every 4 years thereafter,*
 21 *the report under subparagraph (E) shall include*
 22 *a revision of the report under section 404 of Pub-*
 23 *lic Law 101–549 (42 U.S.C. 7651 note) that in-*
 24 *cludes a reassessment of the health and chemistry*

1 *of the lakes and streams that were subjects of the*
 2 *original report under that section.”; and*

3 *(2) by adding at the end the following:*

4 “(4) *PROTECTION OF SENSITIVE ECOSYSTEMS.—*

5 “(A) *DETERMINATION.—Not later than De-*
 6 *cember 31, 2010, the Administrator, taking into*
 7 *consideration the findings and recommendations*
 8 *of the report revisions under paragraph (3)(H),*
 9 *shall determine whether emission reductions*
 10 *under titles IV and VII are sufficient to—*

11 “(i) *achieve the necessary reductions*
 12 *identified under paragraph (3)(F); and*

13 “(ii) *ensure achievement of the envi-*
 14 *ronmental objectives identified under para-*
 15 *graph (3)(G).*

16 “(B) *REGULATIONS.—*

17 “(i) *IN GENERAL.—Not later than 2*
 18 *years after the Administrator makes a de-*
 19 *termination under subparagraph (A) that*
 20 *emission reductions are not sufficient, the*
 21 *Administrator shall promulgate regulations*
 22 *to protect the sensitive ecosystems referred to*
 23 *in paragraph (3)(G)(ii).*

24 “(ii) *CONTENTS.—Regulations under*
 25 *clause (i) shall include modifications to—*

1 “(I) provisions relating to nitro-
2 gen oxide and sulfur dioxide emission
3 reductions;

4 “(II) provisions relating to alloca-
5 tions of nitrogen oxide and sulfur diox-
6 ide allowances; and

7 “(III) such other provisions as the
8 Administrator determines to be nec-
9 essary.”.

10 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS FOR DEPOSI-**
11 **TION MONITORING.**

12 (a) *OPERATIONAL SUPPORT.*—In addition to amounts
13 made available under any other law, there are authorized
14 to be appropriated for each of fiscal years 2003 through
15 2012—

16 (1) *for operational support of the National At-*
17 *mospheric Deposition Program National Trends Net-*
18 *work—*

19 (A) *\$2,000,000 to the United States Geologi-*
20 *cal Survey;*

21 (B) *\$600,000 to the Environmental Protec-*
22 *tion Agency;*

23 (C) *\$600,000 to the National Park Service;*
24 *and*

25 (D) *\$400,000 to the Forest Service;*

1 (2) *for operational support of the National At-*
 2 *mospheric Deposition Program Mercury Deposition*
 3 *Network—*

4 (A) *\$400,000 to the Environmental Protec-*
 5 *tion Agency;*

6 (B) *\$400,000 to the United States Geologi-*
 7 *cal Survey;*

8 (C) *\$100,000 to the National Oceanic and*
 9 *Atmospheric Administration; and*

10 (D) *\$100,000 to the National Park Service;*

11 (3) *for the National Atmospheric Deposition Pro-*
 12 *gram Atmospheric Integrated Research Monitoring*
 13 *Network \$1,500,000 to the National Oceanic and At-*
 14 *mospheric Administration;*

15 (4) *for the Clean Air Status and Trends Network*
 16 *\$5,000,000 to the Environmental Protection Agency;*
 17 *and*

18 (5) *for the Temporally Integrated Monitoring of*
 19 *Ecosystems and Long-Term Monitoring Program*
 20 *\$2,500,000 to the Environmental Protection Agency.*

21 (b) *MODERNIZATION.—In addition to amounts made*
 22 *available under any other law, there are authorized to be*
 23 *appropriated—*

24 (1) *for equipment and site modernization of the*
 25 *National Atmospheric Deposition Program National*

1 *Trends Network \$6,000,000 to the Environmental*
 2 *Protection Agency;*

3 *(2) for equipment and site modernization and*
 4 *network expansion of the National Atmospheric Depo-*
 5 *sition Program Mercury Deposition Network*
 6 *\$2,000,000 to the Environmental Protection Agency;*

7 *(3) for equipment and site modernization and*
 8 *network expansion of the National Atmospheric Depo-*
 9 *sition Program Atmospheric Integrated Research*
 10 *Monitoring Network \$1,000,000 to the National Oce-*
 11 *anic and Atmospheric Administration; and*

12 *(4) for equipment and site modernization and*
 13 *network expansion of the Clean Air Status and*
 14 *Trends Network \$4,600,000 to the Environmental*
 15 *Protection Agency.*

16 *(c) AVAILABILITY OF AMOUNTS.—Each of the amounts*
 17 *appropriated under subsection (b) shall remain available*
 18 *until expended.*

19 **SEC. 6. TECHNICAL AMENDMENTS.**

20 *Title IV of the Clean Air Act (relating to noise pollu-*
 21 *tion) (42 U.S.C. 7641 et seq.)—*

22 *(1) is amended by redesignating sections 401*
 23 *through 403 as sections 801 through 803, respectively;*
 24 *and*

- 1 (2) *is redesignated as title VIII and moved to*
- 2 *appear at the end of that Act.*

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107TH CONGRESS
2D SESSION

S. 556

[Report No. 107-347]

A BILL

To amend the Clean Air Act to reduce emissions
from electric powerplants, and for other purposes.

NOVEMBER 19, 2002

Reported with an amendment